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Original Articles

OUR WORK AND ITS LIMITATIONS.*

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AT the outset, let me state that I lay no claim to represent a class or to speak for a class. By "our work" I mean my reflections upon the work of those engaged in the actual care and treatment of the insane—reflections that are not the offspring of an idle fancy, but the result of hours replete with anxious doubts and heart-burnings. When I first faced the large, compact mass of living material so temptingly spread before the eager eye, I, like many others, resolved upon a course that promised to lead to the achievement of something telling, something lasting. Since then I have undergone a clarifying process, which has resulted in my resigning myself to our limitations; I have learned what I could and could not do, thus finding the guiding star to what I should and should not do. It does not require a very extensive training in the exact methods pursued in experimental laboratory work of to-day to recognize the fact that psychiatry as at present constituted falls far below the standard of an exact science. Psychiatry is an art and not a science.

Truth is a hard task-mistress, and to her mandates we yield, cheerfully if we can, unwillingly if we must. Many a year of careful research work in different fundamental branches of science will have to pass before psychiatry may be able to don the truly scientific garb; then, and not until then, shall we recognize the true nature of psychic disease and its causes, which would pave the way to rational therapeusis. There is no valid reason why we should shrink in shame from such a confession, considering that exact methods in the investigation of disease are products of our own era, following closely in the wake of the late evolution of those branches of science without which scientific medicine would have remained unborn. Except for a few isolated flashes illuminating here and there the utter darkness of past ages, we must look to our own, the nineteenth century, as the soil on which the entire structure of modern science has grown. With Lavoisier's chemical balance, and Berzelius discovery made in 1811, that the composition of organic substance is based on the same infallible laws as that of inorganic matter, chemistry received the impetus to its wonderful development, Physiology and physiologic physics could not possibly have grown without the great number of instruments of precision which the mechanical genius of our time has evolved. Galvani and Volta made their discoveries in and about the year 1800; without these, nerve and muscle physiology would not have attained its present respectable advance. It was by Professor Schleiden, in a memoir published as late as 1837, that the existence of the vegetable cell was established. About the same time, Schwann showed the analogy between the vegetable and the animal cell. The microscope, after its achromatic correction at the commencement of the second quarter of the present century, had ceased to be a pretty toy in the hands of the curious scientist. The entire microcosmos of cell-existence, cell-life and activity was doomed to remain terra incognita until the microscope disclosed new avenues of research. Without the long chain of microbiotic discoveries Behring's anti-toxin would never have seen the light of day. The late development of medicine as a science was necessarily shared by psychiatry; it can be readily understood why the latter could make but slight headway, considering that it deals with the structurally and functionally most complex organ, the brain. The advances made in recent years, which have led to unravelling the intricate mesh-work of brain structure, have not resulted in positive knowledge regarding the true relation between cerebral structure and cerebral function. Who would have the hardihood to contend to-day that the enthusiastically received "neuron theory" has definitely settled that all-important question? What is true of psychiatry is to a great extent true of neurology. The peripheral nervous system, the spinal cord, and even the apsychic portions of the encephalon, are so much simpler in function and so much more accessible to the comparative physiologic experimentation than the psychic centers, that it would have been surprising if neurology had not succeeded in out-leaping psychiatry and in establishing the inter-relation between disturbed function and any particular lesion. But whenever the inquiry is pointed in the direction of the nature of the

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pathologic process and etiologic factors, the neurologist of these latter days is obliged to profess utter ignorance as much and as often as the psychiatrist. The almost entire absence of positive knowledge in the direction indicated accounts for the fact that apparently rock-ribbed pathologic entities of to-day are to-morrow merged into clinical types of the same disease. Let me but point to progressive bulbar paralysis, progressive muscular atrophy of the Aran-Duchenne type, and myoatrophic lateral sclerosis. Not so very long ago these were treated as wholly dissimilar, morbid conditions, while to-day everything points to their being different phases of the same disease. I am expecting that this tendency to amalgamation will in the near future link together two diseases that are thus far considered as utterly dissimilar—I mean tabes dorsalis and dementia paralytica. Their apparent relation to the luetic sub-soil, the usual limitation of the morbid process to certain portions of the cord and brain, the striking similarity of some symptoms, as optic atrophy and iridoplegia; the gray degeneration of the columns of Goll encountered in the so-called dementia paralytica ascendens—all these seem to indicate the identity of the pathologic process; the differences may be accounted for by local conditions prevailing in the cord and the brain.

Dr. Edward D. Fisher closed the discussion on the subject of myoatrophic lateral sclerosis at last year's meeting of the American Neurological Association, with the expression of hope that eventually the influence of the past would be shaken off and a new and more correct classification of these (the above-quoted) diseases would result. This has an undoubted bearing upon psychiatry; old ways and methods of getting at the truth will have to be revolutionized before psychiatry can be said to have safely started on the road of truly scientific research. Two questions have been foremost in my mind: First, are we moving toward the advancement of scientific psychiatry in the work done at our hospitals? Second, should we be expected to engage extensively in original research work? My answer to both these questions is an emphatic "No."

At a glance over the reports emanating from the hospitals for the insane we find that the annual grist-mill grinds out with painful regularity a bewildering mass of statistic tables, the persistent appearance of which can only be interpreted as an attempt to add to the advancement of the world's knowledge in matters psychiatric. These tables have been actually referred to as "scientific" tables. Here we have the nativity, civil condition, religion and occupation of our patients faithfully recorded and officially tabulated. The constancy with which these data are incorporated in the hospital reports can be explained only by a desire to show some causative relation borne by the former to insanity. The fact that false deductions are frequently made from such statistic material cannot be gainsaid. In illustration I shall quote from my last, as yet unpublished, annual report: "A gentleman endowed with superior intelligence addressed a card to one of our local newspapers after having carefully perused my annual report for the year 1896–97. From it he had learned that of 158 women admitted during the year 104 were classified as domestics. These figures suggested to him the propriety of sounding a note of warning to our housewives whose treatment of their servants seemed responsible for such an alarming preponderance of insanity among the latter. Table No. 9 of the present report shows that of the total of 200 insane women admitted 108 appear as having done housework, and 26 were domestics. Of the 184 men admitted 33 were common laborers. We should not be unmindful of the fact that a charity institution located in the heart of a large municipality draws chiefly upon the more lowly strata of society. For the same cogent reason do we meet in the state hospitals of farming states a large number of farmers' wives, while in the state of New York, for instance, out of a total of 20,994 women admitted between October 1, 1888, and September 30, 1897, only seven appear as having followed agricultural and pastoral pursuits. Local conditions determine the character of the population in public insane hospitals, and I am of the opinion that the occupation of the individual patient has in reality little or no connection with his or her psychic malady. When a house-painter becomes insane the cause is not to be sought in the mere performance of his daily labor, but in the poisonous effect produced by the lead-laden paints which he handles; in short, we face here a case of drug poisoning differing in its manifestations but analogous in nature to poisonings by alcohol or morphine. European statistics point to the existence of insanity to an alarming degree among the soldiery, particularly the commissioned officers. No one should be misled into the belief that military life, as such, has much to do with this fact; excesses of all sorts, with their natural allies in the shape of sexual diseases incident to military life, are the real determining factors in this instance. It is my firm belief that the civil condition plays but an unimportant rôle in even remotely causing insanity. The incidents and accidents in any individual's married or single life are so varied that no deductions can be made from such vague statistic material. An examination of Table No. 13, and the corresponding tables in former reports, may possibly tempt some to jump at the conclusion that native Americans are more frequently sufferers than the foreign-born citizens, as the former by far outnumber the latter. A simple arithmetical calculation establishing the proportion between the native and foreign population of this city and the numbers of insane belonging respectively to one or the other class will easily prove the utter fallacy of such a contention. If it has been found that the idle laz-

zaroni of Naples furnish smaller quota to the sum total of the world's insane than the Irish peasantry, it is because the picturesque Italian of that type is able under the blue skies of sunny Italy to eke out a halfway comfortable existence on next to nothing, while the Irish peasant must often face absolute starvation and innumerable hardships; in short, nativity bears no relation whatever to insanity. Regarding religious creeds, I have stated in a previous report that the fact of our having such a large number of Catholics among our patients is readily explained when we consider that St. Louis counts as its citizens a great many members of this particular denomination. A healthy religious trend, without a taint of morbid emotionalism, certainly does not lead to the development of psychic disease. The so-called 'religious' mania afflicts more often persons who have led lives devoid of all religious scruples, as confirmed drunkards, rakes and prostitutes."

Thus far my quotation. No possible objection can be raised against continuing the practice of glutting the world's literature with these statistic tables, but it should be made clear that they throw about as much light upon the scientific problems of psychiatry as the table showing the annual yield of our farm and garden. Now I come to speak of the table showing the alleged or probable causes of insanity, which has always been my particular bête noire. Here no attempt is made to separate the wheat from the chaff, the probable from the improbable. Domestic infelicity, financial reverses, worry, ill-health, disappointment in love—that "broken heart" of the poet, and other incidents of human life, represent worthily the beautiful hodge-podge of lay-notions. The very nature of this statistic material and the manner of its tabulation point unmistakably to bold guesses by the sufferers' kindred, which are elicited in the anamnesis and preserved in their thin pseudo-scientific garb to wondering posterity. I have been astounded to find insane heredity placed on an equal footing with the above-quoted galaxy of highly problematic causes, as if the hereditary predisposition were not in most cases the determining factor in creating the essential subsoil in which the pathologic process most readily roots and grows. Even though there is cumulative evidence that some sort of causative relation exists between psychic disease and such agencies as puerperium, trauma capitis, insolation, infectious diseases, particularly lues, alcoholism and other drug-poisonings, we are still in utter darkness about the real processus and causa morbi. This deplorable inability of fathoming the true nature of psychic disease makes itself keenly felt in our classifications of insanity. The grouping of insanities, as psycho-neuroses, psychic degenerations, organic psychoses and developmental psycho-asthenias, is of undoubted practical significance, especially as their proper and timely recognition has great weight in the prognosis of each individual case. But the absence of all exact interpretation of the pathologic process renders the scientific value of such a classification highly questionable, to say the least. Take as an illustration a genuine functional psychosis and one that so often appears in the course of dementia paralytica; clinically, the differential points are readily enough established, but can this be said of the morbid process which engenders these clinical manifestations? The earlier we recognize the fact that clinical methods of investigation will never lead to the solution of the essential nature of psychic disease, the sooner will psychiatry reach the dignity of a true science. I profess that I have no reverence for the old simply because it is old and hoary; for the traditional, because it has thus far been accepted as the alpha and omega of our knowledge. Why should we shrink from the destruction of time-honored scientific idols when it will be followed by the erection of a structure grounded solidly on exact methods of modern science?

After admitting humbly the utter inadequacy of our present mode of procedure, we must ask ourselves the question, how we, whose life-work lies among the insane, are to proceed to add even a single jot to the future science of psychiatry? We could do more than that, if we were given the proper facilities with all that these imply. We should be able to satisfy the most exacting demands for original research-work by the establishment at each hospital of fully equipped laboratories, by the employment of the best skill in the different branches of scientific research, and by the transformation of our asylums and hospitals into sanitaria which would attract all incipient neuropathic and psychopathic patients. Is this feasible? Will such favorable conditions ever prevail except within the confines of visionary dream-life? There is no reason why we should give ourselves up to idle speculation when the way out of the difficulty has been clearly shown to us by the State of New York, in the creation of its Pathological Institute, where, if untrammeled by traditional views, if fostered by a true scientific spirit, psychiatric science promises to grow to what it should be. The immense scope of the work at the Institute is best shown by naming the different branches of science that enter into the sphere of its activity; here we find psychology, psycho-pathology, experimental physiology and pathology, cellular biology, pathological anatomy, comparative neurology, physiological chemistry, anthropology and bacteriology. The work in some of these branches must necessarily be done at the hospitals; but even there, to be of value, it must be performed under the direction of a specialist, by trained assistants whose methods should be faultless and beyond reproach. No valid objection could possibly be raised to the pursuit of such work by our assistants and ourselves even under conditions prevailing at present, but we should certainly not attach to

our labors the intrinsic value possessed by the work of thoroughly trained specialists. In this connection I may quote the following passage from the report of one of the hospitals received some time ago: "The scientific work in the medical department is kept well abreast with the advance of the day. * * * The pathological laboratory serves a most excellent purpose; it is of great value not only in the matter of diagnosis but in the accumulation of most interesting material." And these words emanating from an institution that, to my knowledge, has never startled us by particularly progressive work. I firmly believe that such words, embodied as they are in a report to superior officers, *i. e.*, boards and legislatures, are bound to create the impression that the work done at that particular hospital promises greatly to advance psychiatric science. As long as we hide under the cloak of self-satisfaction relief will never come to us. Bold, oft-repeated confession of total absence of opportunities for research-work would eventually arouse popular opinion to a sense of realization of our real needs, and with the growing popular opinion as a *vis a tergo* the law-making bodies of every commonwealth would rise to the occasion by following the brilliant example set by the State of New York. The demands made on the hospitals for the insane for startling, epoch-making discoveries are manifestly absurd under present conditions. It is but too frequently forgotten that the man at the helm of a hospital for the insane is, first of all, a practicing physician. The fact that the peculiar nature of the patients necessitates their aggregation in large numbers under one roof does not affect the truth of the above proposition in the least. He should be a scientific physician, and by this is meant one who will absorb and digest all intellectual pabulum offered by his science, who will ever keep abreast of the times and who understands how to apply the thus accumulated knowledge for the benefit of his patient. The scientist, on the other hand, is the man who evolves scientific facts and truths, and to him we must look for advanced knowledge and new methods. No river can ever rise above its source.

In the foregoing I have attempted to point out our limitations which are not rarely commented upon by self-constituted critics, who, as a rule, are completely ignorant of the work accomplished in the hospitals for the insane. I shall ever remember the following exclamation of one of these critics, made at the meeting of a neurological association: "What have these hospitals ever given us? Not even a book has come to us from them." He did not realize that the latter circumstance was certainly a cause for genuine congratulation, for a new book on psychiatry does not mean simply an addition to medical literature, but it also means, *horribile dictu*, a new classification. In my opinion the best works on psychiatry as an art have been written, while such on psychiatry as a science must remain products of the future. I never could see why so much veneration should be bestowed on the man "who wrote a book," for a really good book is at all times and in all lines a *rara avis*, while the writing of a mediocre one presupposes nothing else than the possession of some knowledge, a facile pen, and a great deal of dogmatism.

Many of us at some period of our lives may have stood at the parting of the ways, one leading to the career of the scientist, the other to that of the physician in active practice. After having chosen the latter, have we any valid reason for regret, or for feeling humiliated over the narrow scope of the field of our labor? I, for one, firmly believe that we may calmly resign ourselves to our limitations, and still have great opportunities for work that will tell in more than one direction. First of all, the insane as a class must look to us to bridge over the chasm yawning between them and their fellow men. Who would deny that the difficulties encountered in finding support for improvements essential to the treatment and comfort of the insane, arise chiefly from the utter ignorance on the part of the people at large regarding the nature of insanity and the insane. Superstitious notions, given down from generation to generation through centuries of almost complete intellectual stagnation, die hard; the death blow must be struck by us whose special training and knowledge command respect in our respective communities. Outside of the deeply-rooted misconceptions of everything pertaining to the insane, there are some plain surface indications pointing to the great need for an unremitting propaganda of modern views. Within the borders of a commonwealth which has ever borne the emblem of intellectual progress—in Massachusetts—we find a monument erected to the memory of antediluvian psycho-pathology in the abominable name "Lunatic Asylum." What dangers even to our present achievements threaten from men who are apt to mould public opinion, was clearly shown when, only a few years ago, the Governor of the State of New York branded the insane in the public hospitals with the appellation "paupers," strongly advocating, in his message, considerable retrenchment in expenditures for their support. The gist of his remarks was that these paupers were treated entirely too well, a sentiment calling for most forcible condemnation. A fruitful object for thorough missionary work is the field of politics, which in many states still embraces our public institutions. The Jacksonian motto, "the spoils belong to the victors," has there full sway; actual merit, scientific fitness and ability are cast ruthlessly to the winds, yielding the palm of supremacy to political preferment. At some hospitals this diabolical influence makes itself felt down to the very lowliest dishwasher. It was the cause of profound distress to me when I learned that there

was at least one medical man in charge of a hospital who, by his own acts, fostered this spirit of political qualification. An ex-attendant applied to me for employment, presenting a letter of recommendation worded by the said superintendent in language so highly eulogistic that he would have passed anywhere for the beau-ideal of an attendant had he possessed only one-half of the attainments ascribed to him. I brought out through some questioning that the superintendent had expressed his regrets when calling for the attendant's resignation, saying that he needed the place for a friend of his. Such a man is utterly unworthy of the high trust bestowed upon him, and should be loathed by all good men. If occurrences of such a nature are possible in a hospital presided over by a "Medicinæ Doctor," what is to be expected of institutions that are euphemistically styled county asylums, while they really are almshouses for the insane? In a solid phalanx, with written words and words of mouth, we must stem the tide of retrogression, which has shown a dangerous tendency to engulf some of the best intellects within the precincts of several commonwealths. If all counties were possessed of a high degree of enlightenment and of financial prosperity, they might safely be allowed to solve the problem of the care of its insane. But could this be done with any degree of safety in counties whose poor-farms to-day are veritable breeding places of vice, presenting in every detail the picture of utter neglect? We should not rest until the talk of introducing the county asylum system is silenced beyond hope of revival. Let State care be our goal, and by that I mean the real, unvarnished article, not the one that passes for the former, but in truth represents congregated county care, each individual county being interested exclusively in its own insane. The process of public education should lead to the establishment of homes and schools for imbecile children, of colonies for epileptics, and, possibly, of colonies for the chronic insane.

In the foregoing I have attempted to call attention to some vital points that could profitably form the subject of persistent agitation. How are we to proceed to make this agitation as far-reaching as possible? It is certainly not sufficient to discuss these matters at meetings or among our intimates; in such a manner we shall never succeed in reaching the large mass of people whom we must win over to our way of thinking before results may be hoped for. I repeat again that this broad educational work can best be performed by means of the reports emanating from our hospitals for the insane. "In order to do this successfully the nature of these reports, in most instances, must undergo a radical change. Simple statements of facts and figures regarding operations, administrative improvements, and defects, make dry and unprofitable reading, and promise no educational results. We must infuse ideas into our reports, ideas dealing with the vital problems of insanity and the insane generally; we should not hesitate to dip into the individual lives of our patients, and relate incidents that may bring the sufferers into closer communion with the reader; in short, let us write our reports so that they will be readable, and read by intelligent members of our respective communities, who are not engaged in institutional work, and who are not statisticians. An aggressive, unceasing agitation conducted systematically, year in and year out, through the territory tributary to every hospital for the insane, must eventually bear fruit in disseminating true knowledge of the insane and their needs. With such knowledge will come a broadening of sympathies, which will go far towards helping us in our single-handed struggle for the most advanced methods of their treatment."

Wherever our hospitals are located within the reach of a center of medical education, we should invite the clinical instruction of the medical student in matters psychiatric. During the last four years I have had the pleasure of conducting a double course of clinical demonstrations for students, and another for a limited number of young practitioners, and I am certain that I have succeeded in impressing their minds with the importance of comprehending some phases of our work. We should not be unmindful of the fact that the student of to-day will be the physician of to-morrow, and that the importance of the sympathetic support of the medical profession should not be underrated. I should be glad to see our hospitality extended to the student of law, for the legal profession presents a great field for dissemination of modern conceptions of insanity. Reform in legal proceedings against the insane, in which the latter are treated as criminals guilty of the heinous crime of "mental unsoundness," can only be instituted with the help of the legal profession. No one, unless possessed of a mind steeped in prejudice, will deny that the present "*de lunatico inquirendo*" procedure is utterly out of date; and there are other instances pointing clearly to the great need for reform. I cannot close this chapter more fittingly than with an appeal to the members of this Association to join hands in the battle against superstition and prejudice. The insane rightly look to us for protection and for advancement of their interests.

Thus far I have tried to outline our work *extra muros*, which perhaps is slow to show results, but perseverance and tenacity of purpose have won victories before. *Intra muros* lies the arena of our real labors, the fruits of which are immediate. We need not await startling discoveries from scientific laboratories and institutes to proceed with improvements demanded peremptorally by the present state of our knowledge. Most of us have no training schools for

nurses, which are so essential a factor in the proper care of the insane. No effort should be spared to establish such schools at every one of our hospitals, and once established their graduates should receive higher compensation for their services than the one in vogue to-day. With the improvement in quality should come an increase in numbers. The more good attendants we employ the more closely we are able to adhere to the principle of individualization, which is the *conditio sine qua non* of successful treatment of many of our patients. Individualization cannot possibly be carried too far in dealing with the insane. In connection with this I desire to condemn, most forcibly, the so-called congregate dining-room plan, which has found quite a number of advocates chiefly on account of its labor-saving features. There may not be any valid objection raised to the herding together of terminal dements and idiots in common dining-rooms, but convalescents as well as chronic insane with only slightly impaired intellectual power, could hardly be expected to derive much comfort from those large feeding-places. Even the addition of orchestral music during the meals, as suggested by the late Dr. Rohe, would certainly not outbalance the distasteful features accompanying such indiscriminate mingling of different classes of insane. In order to test the soundness of my conception, I submitted the question to a vote by my patients and they unanimously decided in favor of their present separate dining-rooms, furnished with small tables seating four congenial companions—music or no music. The solution of such problems can safely be entrusted to those directly concerned. Speaking of dining-rooms, I will allude to one feature with which I was made acquainted in at least one hospital. There I found the patients' tables adorned with beautiful linen which made me positively envious until I learned that this linen was removed before each meal; in other words it was part of a general display for the benefit of the admiring visitor. This is not only a piece of the most reprehensible deception practiced on the unsuspecting visitor, but it must affect injuriously the self-respecting patient, who sees himself considered unworthy of eating at a table so temptingly adorned between meals. What does not directly or indirectly bear some relation to the welfare or well-being of our patients should remain undone; not an inch should be yielded to idle display for the benefit of visiting boards and other visitors. In devising any improvements not a thought should be given, not a concession made, to the possible effect they may have on anyone except our patients. The spick and span order encountered in the visiting wards of some hospitals, with the attendants silently reposing in easy chairs, and with the whole picture held down to a tone of appaling listlessness, is surely not to be commended for imitation. To change the mere shell of a house into a home it must bear unmistakable signs of human habitation and human presence. My heart goes out to a ward with papers and books strewn around; with chairs scattered here and there instead of being strung out in truly martial style—in short, to a ward breathing active, vigorous life.

In expressing, in the beginning of my paper, the hope that rational therapeusis would soon supplant our present empirical methods, I did not intend to convey the idea that we stand utterly helpless to-day in dealing with psychic disease. That all somatic disturbances carefully elicited by means of approved clinical methods are to be dealt with in the insane as in the sane needs no further expostulation. All our efforts must necessarily and chiefly be directed toward correction of functional disturbances of the vegetative organs and the improvement of the general nutrition, with the hope of impressing favorably the general nervous system. I have heard, as one argument set forth against the consideration of insanity as a symptom of actual brain-disease, that in some cases the general nutrition had reached a high degree of perfection, while the manifestations of the psychic disease still persisted. What do we know as yet of the chemism of the highly-specialized brain-cell? May we not justly assume that there are special nutritive conditions essential to the structural completeness and functional well-being of this cell—conditions which cannot be recognized by the increase of avoirdupois, nor by the use of the hematometer or hemoglobinometer?

Unfortunately popular belief in the existence of specifics for the restoration of disturbed psychic function is not founded upon actuality; all we can do is to effect favorably psychic function with psychic agencies. Here we imitate as closely as possible nature's course when she stimulates the growth of the infant's brain by means of peripheral impressions. Cheerful surroundings, useful employment, entertainments, and other agencies of similar nature, have for their ultimate aim the production of healthy cerebration. But among pscyho-therapeutic agents, one is of special importance, and that is our own psychic self freely and generously offered to our patients. Our own personality must wholly enter into their existence: from us they must sap invigorating strength and vitality. In the direct communion of our minds and our souls with theirs lies the chief secret of success in psycho-therapeusis. This task may prove at times wearying; but, to do our work conscienciously, we cannot shrink from it unless from healers of human kind we are willing to sink to the level of mere custodians of so much human flesh.

In thus cursorily reviewing the work before us, we may well ask ourselves: must we fear our traducers' bolts? When hundreds of our patients, who in the course of years are reclaimed to their homes and to spheres of usefulness, part from us with grateful hand and heart, have our lives been truly lived in vain? If our work is done, not with the lukewarm love of the bread-winner, but with the love of the enthusiast, we may calmly turn our glance at duty well performed—at our mission worthily fulfilled.

MEDICAL REVIEW

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THE ARMY RATION.

At the outbreak of the late war the medical press presumed to criticise the army rations quite freely. We were then told that the ration was the composite result of decades of thought on the part of the commissary general and the head of the medical department, and it was doubtful if anything that human ingenuity could contrive would improve this already quite perfect product of official ratiocination.

MAJ. L. L. SEAMAN, who was with the army in Puerto Rico, publishes in the *Sanitarian*, July, 1899, suggestions for feeding the army under tropical or semi-tropical conditions. He recommended that the beef component and the salt pork be reduced one-half and farinaceous food and fish be substituted. Salted rations should be issued but once, or, at the most, twice a week. Fresh meat should be provided from animals slaughtered at the point where issued. Where native cattle in good condition cannot be procured, cattle from Texas can be easily transported by the Government. Of the cereals, one of the best is hominy. The hulls of the maize being removed in the course of its manufacture, this source of irritation is avoided, while the grains, when softened by a thorough cooking, are nutritious, easily digested, and relished by the men. Equally valuable is the ration of rice now issued, and which should be quadrupled in quantity.

The white bean of this country should not be issued for use in the tropics; in its place should be used the black or red native bean (frijol), which, while resembling the common bean in shape, is different in its properties. The hull is much thinner, and when thoroughly cooked does not irritate, while the pulp is drier, breaks up readily with cooking, and is easily acted on by the digestive fluids.

THE VALUE OF THE STUDY OF MATERIAL THINGS.

A remark recently made in the writer's presence, was to the effect that all kinds of fads and crazy notions, meaning by this Christian Science, faith-healing, curing by the laying on of hands, and other occult means of treating disease, were gaining ground and were never more rife than at the present time. With these conclusions we do not agree; the Middle Ages, with their witch-craft, we think, presented a sum total of absurdities greater than any now known. The fact remains, however, that such beliefs are far too prevalent in a community which boasts of its civilization and higher education.

In discussing the matter, it will be frequently stated that the Christian Science *et al.* include some of the most intelligent people in the community—persons who are prominent in business and social life, and for the most part well-to-do. If any large number of these people are examined, their knowledge of the natural sciences is found to be very deficient. There are very few of them who, if asked, can tell how water boils, why the dew falls, how fire burns, or give any rational explanation of the natural phenomena about us. The teaching of the natural sciences will go far to eradicate these evils, particularly should it include the study of biology. In the last number of the *Journal of Applied Microscopy* is a description of the biologic work done at the Detroit High-school. This is not the perfunctory teaching from the text-books; but is carried on in three laboratory rooms. Microscopes are employed, and the pupils are brought in direct contact with the objects to be studied.

WHERE SHOULD MEDICAL SOCIETY MEETINGS BE HELD?

The late meeting of the American Medical Association at Columbus showed some things anent medical society meetings to which too little attention has been paid. The efforts of the local profession were taxed to the highest degree, the heaviest burden being thrown upon the chairman of the Committee of Arrangements, Dr. Starling Loving, and his assistants, a burden which should not be put upon any one man nor group of men. It has been the custom for large associations to meet as the guests of the local profession in the city in which the meeting is held. This, while having many pleasant features, particularly for the visitors, puts an enormous burden upon the entertainers. Physicians who are public-spirited and who take a pronounced interest in medical society

meetings, are usually those who have large practices, and to have the additional burden of preparing for one of these great meetings is one that creates a real hardship. It would be better if the great national society meetings were, so far as as possible, held at summer resorts, and provide for their own entertainment, the officers of the meeting arranging all the details of the meeting. This would be by far the most satisfactory arrangement and would do away with unwise effort on the part of one place to out-do another when entertaining an association.

THE BUBONIC PLAGUE.

Some months ago, in these pages, we called attention to the danger that threatened Europe and this country from the plague. Our comment was made shortly after the laboratory outbreak in Vienna; although we did not attach much importance to that, we considered the danger of the plague becoming epidemic in the poorer quarters of western cities. Of late the English and Continental press have had sensational articles under the general heading, "Europe Threatened With the Plague." The *Medical and Surgical Review of Reviews*, June, 1899, has a discussion on these communications, and expresses a confidence in modern science preventing the spread of the plague in which we do not join. The *Review of Reviews* says, while there is no exaggerating the danger that may be incurred by disregarding proper precautions, we do not believe that there is any probability of there ever again being an extensive outbreak of the plague in civilized Europe, if the authorities take suitable steps to prevent its introduction from oriental countries. It is true that the sanitary conditions of many of the occidental cities are deplorable in the extreme; still we have no doubt but what modern science has largely robbed the plague of its former terrors for Western Europe. The danger has, however, of late been steadily approaching, and the recent appearance of the disease in Egypt while not necessarily a cause for grave alarm, calls attention to the necessity for drastic measures on the part of European authorities.

The liability of such places as Constantinople, Naples, Marseilles to become points of infection cannot be denied, and the axiom that whenever there is an affected area within six days of Europe quarantine must be adopted, is, we think, a good one. A serious outbreak either at Alexandria or Cairo, such as of late has been raging in Hong Kong, would certainly occasion great anxiety. So long as the vast hordes of pilgrims meeting annually at Mecca are allowed to disperse to the four corners of the Mohammedan world, without adequate sanitary precautions, fatal outbreaks in Eastern Europe and Northern Africa may be expected. Last year the medical officers of Egypt saw the probable results of the pilgrimage to Mecca at a time when the plague was so prevalent in Bombay, Kurrachi, and other places in India, and made strenuous efforts to prevent the Egyptian pilgrims from departing; but they were unfortunately overruled by the native administration, and it is doubtless due to this fact that the plague has now made its appearance in the Khedive's dominions, where, notwithstanding the vigorous reforms instituted since the British occupation began, the sanitary conditions of most of the towns and villages remain little better than those of average Asiatic countries.

The recrudescence in various parts of the world of this ancient disease, of which so little was heard for so many years, is notable. Besides the terrible ravages of the plague during the last year, in India, at the beginning of the last April, cases were observed at Kwang-Chau-Wan, the Chinese province opposite the island of Hainan, from whence it was conveyed into Indo-China, while later still, in the early part of May, it made its appearance on the Ivory Coast. These distant, widely separated centers of infection, without counting others not yet suspected, emphasize the urgent need of energetic and immediate steps for safeguarding Europe. The ignorance, indifference, and carelessness of Eastern natives, their fanaticism and inability to take a rational view of disease, must be combatted, forcibly, if necessary, if the plague is to be prevented from traveling westward, the same route traversed by the cholera, and the many epidemics that, in the the Middle Ages at any rate, wrought such havoc among the Western as well as the Eastern nations.

REFORM IN PUNISHMENT OF CRIMINALS.

From the great interest which the Dreyfus case is manifesting throughout the civilized world, it is fair to assume that some effort will be made to effect reforms, not only in the methods of punishment, but also in the location of prisons. We have heard much of the abolition of instruments of torture, the whipping post and the incommunicado system, until the dungeon and the bread-and-water diet constitute the severest forms of prison discipline. Penitentiaries and workhouses and prisons have responded to the changes which hygiene has forced upon all modern institutions. Not so much, however, has been done in regard to the location of a prison, and in some countries it seems the rule that all political offenders should be consigned to quarters where conditions are such that the earth will not be long burdened by their presence. The lonely prisoner of Devil's Island lived through the five years of solitude and mental, if not physical, torture, but not in vain, if his sufferings call attention to the necessity of changing the practice which consigns the innocent, or the guilty for that matter, to a living death.

Society Proceedings

ST. LOUIS MEDICAL SOCIETY.

MEETING MAY 20, 1899, DR. JOSEPH GRINDON, PRESIDENT, IN THE CHAIR.

Drs. M. DWIGHT JENNINGS and R. C. BLACKMER presented a

Stereopticon Demonstration of the Structural Changes of the Kidneys in Bright's Disease.

A cystic and a contracted kidney, both from the same patient, though differing very much in appearance, were the result of one and the same disease.

The subject from whom these specimens were taken was a physician, about 42 years of age; his family history was good; his father died at the age of 84, mother still living at 68; he was about 5 feet 9 inches in height; weighed 185 pounds; a hearty eater and drank freely of whiskey and beer. Had gonorrhea several years previous to his death; history as to syphilis indefinite; no history of scarlet fever, diphtheria, or any of the exanthematous diseases; his general health was always good; his powers of endurance as good as would be expected of a man of his physique. The only ailment he had during the last twelve years of his life was a hydrarthrosis of one knee-joint, which upon two occasions during the same year, about two years previous to his death, gave him considerable trouble. The hydrarthrosis each time was of short duration, subsiding after aspiration. He attended to his professional duties until within a few days of his death; the last month of his life he was drowsy; could go to sleep any time of the day. This drowsiness, with some slight muscular pains in the legs, were the only symptoms complained of by the patient; on May 20, 1896, a very hot day, he was down town as usual; suffering from the depression of the heat, he concluded to go home; about one o'clock P. M. he started home on a street car, and had gone less than a dozen blocks when he was seized with a severe convulsion. This convulsion, the first and only one he had, lasted for about an hour, when it passed off into a deep coma. He remained in this comatose state for about 24 hours, when, after the action of a drastic cathartic, he regained consciousness for a short time; he again soon relapsed into a coma, from which he never rallied, but sank rapidly, dying in about 54 hours from the time of his first convulsion.

He had knowledge of his disease for five or six years, having been rejected by the examining physicians of two different insurance companies. His knowledge of his malady, however, was never any more definite than this, as he did not take the pains to investigate his case himself or have anyone else do so until about two weeks previous to his death, when the following conditions were noted: a dull, languid feeling; drowsiness; some irregular pains in the muscles, chiefly of the legs; very slight puffing of the under eye-lids, more marked in the morning; no anasarca; the skin fairly active; conjunctiva and mucous membrane of the lips pale, and anemia; there was no dyspnea, nor had ever been. Urinalysis on or about May 6, 1896, was as follows: color, light; acid, sp. gr. 1009; urea, 12 per cent.; the amount of urine voided in 24 hours not ascertained because of carelessness of patient.

The microscopic appearance of the kidneys is as follows: The two kidneys differ greatly in size and shape; the small one is about half the size of a normal kidney, while the larger one was about twice as large as the normal kidney, bearing no resemblance to a kidney; it is irregular in shape, boggy, soft and fluctuating, measuring 6 inches in length and 4 inches in diameter; the small kidney retains the normal shape, with the following dimensions: $2\frac{1}{2}$ inches long, $1\frac{2}{3}$ inches in width, and three-fourths of an inch in thickness. On inspection the capsule is found very thick, opaque and firmly adherent to the surface of the kidney. The surface is granular and rough, and the granules are small, pale and regular in size.

The cortex, which is tough, is found to be very much contracted, being about one-fourth the thickness of that of the normal kidney. The thinning of the cortex is the most marked at the base of the cortical pyramids. The edge of the cut surface is well marked and is uneven. When this kidney was first opened it was of a brick-dust color, though lighter than the normal. The parallel radiating lines, composed of the straight-tubules (pyramids of Ferrein), are almost entirely obliterated and the interlobular arteries are very much thickened. This irregularity is characteristic of the disease, and even in the early stages, when no other naked eye evidences can be made out, it is quite sufficient to indicate the presence of atrophy. The large branches of the renal artery are rigid and firm, and the walls are so thick that the lumen of the vessel stands out very much more than in the normal condition. The medullary portion is pale and atrophic. In the pelvis there is more fat than is normally found in this region.

The large kidney which is now greatly reduced in size, owing to the collapse of a number of the cysts after puncture and the escape of the fluid contained in them, is cystic throughout. So complete is the degeneration that it is not possible for that kidney to perform any function whatever. The capsule is very much thickened.

The cysts were filled with a serous fluid, which was of a dark-brown or a chocolate color, evidently from the coloring matter of the blood.

The greater part of this mass is made up of one

large cyst, which has no direct connection with numerous smaller cysts.

Sections of the small kidney under the microscope show that the departure from the normal organ is greater than was supposed, judging from the macroscopic appearance.

The adherent capsule is thickened and lamellated, showing an enormous hyperplasia of fibrous tissue. In the cortical pyramids the greatest changes have taken place. The malpigian bodies are in all stages of degeneration, from a hypertrophy (which is compensatory or physiologic) to a small atrophic granular mass. Bowman's capsule is very much thickened with fibrous tissue, and distended. The glomeruli are undergoing degenerative changes; the capillary vessels of the tuft are often thickened and fibrous.

The convoluted tubes have almost all cast off their epithelium; some are distended, and some are contracted, having been replaced by a modified connective tissue. The cortical pyramids are now made up chiefly by a hyperplasia of embryonic connective tissue intermingled with fibrous tissue, the fibrous tissue being greatest along the arteries and Bowman's capsule.

In the medullary pyramid we find less change than in other parts. We find the straight tubules of Henle and the collecting tubules most of them obstructed; some dilated, others not. The obstructed tubes are filled up with casts, made up of degenerated epithelium and fibrin.

The walls of the cysts in the large cystic kidney are composed of dense fibrous tissue, lined with a modified epithelial lining.

The cysts are retention cysts formed by the deposits of fibrous tissue around the tubules, obstructing passage of the urine, which accumulates in the capsule of Bowman and the convoluted portion of the tube, converting them into a cyst.

The question now naturally arises, are there any other tissues or organs in the body affected, and what has caused this disturbance? In this case the opportunity to make a complete examination did not present itself, but judging from other cases of contracted kidney, the arteries of the entire body have undergone pretty much the same changes. The walls are thickened with layer after layer of fibrous tissue, involving the inner coat of the vessels. This fact enables one to understand some of the varying symptoms met with in chronic Bright's disease.

A thorough study of the morbid changes in this malady leads to the belief that chronic Bright's disease is more of a general fibrosis than it is usually supposed to be, and not exclusively a disease of the kidneys. The histology of the kidney is sufficient to explain why the kidney should suffer more than any other organ or tissue.

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DISCUSSION.

DR. L. BREMER: I would like to ask the doctor what the size of the larger kidney was.

DR. JENNINGS: When first removed and before the cysts were punctured it was about six inches long and about four inches in transverse diameter.

DR. BREMER: And the smaller kidney, was that larger than a normal kidney?

DR. JENNINGS: No, sir; it was about half the size of a normal kidney—about two and a half inches long.

DR. BREMER: When I looked at the slide it reminded me very much of a number of cases that I have had under anatomic and microscopic observation. The doctor alluded to what he called embryonic connective tissue cells. That was at a place where there was a great amount of new formation; in fact, what the doctor has shown us comes more under the head of a neoplasm or new formation than under the head of degeneration. There is an excessive amount of newly formed connective tissue. Looking at the specimen without having seen the actual size of the kidneys, and looking at the slides from an unprejudiced point of view, I fancy this is not Bright's disease, but that it is a new formation, possibly some places with breaking down degeneration in consequence of obscuration of the vessels and of obstruction of the urinary tubes. But the principal part of the tissues which was exhibited was of a new formation; that is to say, of the fibroma type. It partook of the nature of the sarcoma. I would diagnose from what I have seen here that this morbid specimen is one of a fibro-sarcoma, and since there were cysts—and a good many cysts at that—I would say it was a fibro-cysto-sarcoma of the kidney. I do not know whether that will tally with the inspection of the specimen under the microscope, but that is my impression. What speaks against this is the comparative smallness of the kidneys, especially of the smaller kidney. As a rule, in fibro-sarcoma both kidneys are involved. Here one kidney is certainly not sarcomatous.

DR. BLACKMER: I would like to ask Dr. Bremer if the length of time that this gentleman was sick would not exclude the diagnosis of sarcomatous disease?

DR. GRINDON: How long was he sick?

DR. BLACKMER: Seven or eight years. Then again, there might have been syphilis in the case. There is no history that would positively demonstrate that, but in the case there are circumstances that lead up to the suspicion that there might have been at some time.

DR. JENNINGS: The size of the small kidney, and also of the larger, and the length of time that the disease extended, would lead me to believe that it is more a case of chronic nephritis—a general fibrocyst. I did not have a chance to examine the vessels from any other portion of the body and cannot

say in what condition the vessels were. Taking the specimen as it is shown under the microscope, the deposit of fibrous tissue being greatest in the neighborhood of the arteries and Bowman's capsules, we can realize how it is possible for those cysts to form. The fibrous tissue seemed way down in the medullary portion as an obstruction to the tube. It is possible that some of the vessels supplying the part have not become atheromatous; the blood is still circulating; those tufts are still supplied with blood, and the obstruction is farther on; we have then an accumulation as the result. If those tufts keep functionating the accumulation will produce distension. The pressure here, as it increases, will certainly destroy the function of the tuft; the normal epithelium of those obstructed tubules will certainly have degenerated, or be cast off—the epithelial layers are thrown out; and nature goes on trying to restore it until the epithelial lining, the tubes, or possibly Bowman's capsule, will have become so changed that it is no longer of a normal appearance, or hardly an epithelial lining. The new epithelium lining here is able to keep up the secretion then. Certainly if the compression lasts for any length of time the function of the tufts is going to be destroyed from the compression. The vessels possibly become atheromatous, and already we have formed the lining membrane—a modified epithelial lining, which is able to keep up the secretion producing cysts.

Notes and Items

A broker of New York City filed a petition in bankruptcy, with liabilities of $29,357. He had no assets, except clothing worth about seventy-five dollars. Among the debts which were scheduled was $1,460 due twenty-eight doctors and $350 due three dentists.

Governor Roosevelt has signed a bill authorizing the establishment of a sanitarium for consumptives in the Adirondacks. The bill involves the question of the right of a municipality to erect and maintain hospitals beyond their corporate limits for the treatment of the indigent.

The Independent Medical College of Chicago, a notorious diploma mill, that has changed its name several times, and has much trouble with the Illinois State Board or Health, whose praiseworthy efforts to suppress this institution were worthy of better success, has planted a numerous progeny in different parts of the country. In one Michigan town twenty-three of the local practitioners claim as their alma mater this notorious institution. In different parts of the country the profession have been making noble efforts to suppress this sort of thing, and to place upon the statute books laws to regulate the practice of medicine. The public health is jeopardized and the public purse depleted by the activity of these diploma alumni. As long as the public can stand it the medical profession ought not to complain.

The last Congress passed an act authorizing the supervising Surgeon General of the Marine Hospital service, under the direction of the Secretary of the Treasury, to appoint a commission of medical officers of the Marine Hospital to investigate the prevalence of leprosy in the United States. In addition, they are to recommend such legislation as is deemed necessary for the prevention of the spread of this disease.

It is announced that Harvard University is to have a well equipped hospital for the treatment of students or teachers who are taken ill during the academic year. The foundation of the new institution is a bequest of Mr. Jos. Stillman of New York. The structure will be known as Stillman Hall. It is expected that those students who can afford to pay for medical care will do so, employing if they so desire their own physicians. Those who cannot afford to pay will be treated free of charge by the medical visitor of the college. We wonder that the necessity of providing an institution of this kind has not been met by some of the larger universities. While the amount of sickness in these communities is not great, yet the necessity for some such provision where a retreat can be made for a few days, thus relieving dormatories, is certainly apparent.

Yellow fever is reported to have broken out in the Fifth Infantry, which is quartered in the Spanish barracks at Santiago. Based upon statistics of this disease among the Spanish troops, during their residence on the island, it is estimated that among the fifteen thousand American soldiers on the island, there will be about 2,200 cases of yellow fever and the mortality will be about 700. This will be the case if the mortality of the Spanish is maintained, but it is thought that the greater precautions which are taken to protect our troops against infection will result in lessening these figures. In this connection, Dr. Doty, Health Officer of the port of New York, reports that he has successfully isolated the bacillus of yellow fever. He also claims to have produced, by inoculating horses, a serum which he believes to be a specific remedy for this disease. The material for making these investigations was obtained from patients who had contracted yellow fever in Panama, and died in the New York Quarantine Hospitals. The serum is claimed to confer immunity upon guinea pigs, but has not yet been tested upon the human subject. Some of it will be sent to Havana at an early date, and the first case treated at the Quarantine Hospital will be injected with the new remedy.

Current Medical Literature

Congenital Fistula of the Cornea.—M. A. TERSON* reports a very rare case of congenital lesion of the cornea. Infant was born at full term, and there was no traumatism during birth; delivery was natural. On examining eyes immediately after birth it was noticed that, while the left eye was perfectly normal, right eye showed a central fistula of the cornea. The anterior chamber was completely obliterated, iris was adherent to the borders of the fistula and the aqueous humor constantly dripped out. The fistula closed at the end of three weeks. In the fifth month of pregnancy the mother was thrown violently against the sharp corner of a table.

Partial Extirpation of the Ovary.—In certain cases of ovarian tumor the partial resection of the ovary is of the greatest advantage to the patient. Where such is the case, the patients have a right to demand that they be not castrated. GERSUNG† reports cases operated several years ago, showing very satisfactory results. In these cases large ovarian cysts were removed on the one side, and small ones on the other simply "shelled out," leaving as much of the ovary as possible intact. Menstruation continued, and in some cases conception occurred. This procedure is justified only in simple and dermoid cysts. In case of carcinoma, papillary cystoma and papilloma, both ovaries should be removed, even if one be normal.

The Alkalinity of the Blood in Its Physiologic and Pathologic Relations.—J. H. SALISBURY,‡ from a review of our present knowledge of this subject, reaches the following conclusions: The reaction of human blood is constantly alkaline; the alkaline reaction is due partly to inorganic alkalies and partly to substances of organic nature which are probably derived from the proteid food. The regulation of the reaction of the blood is due to the action of the kidneys, and probably of the liver; the alkaline reaction of the blood is reduced in various diseases—uremia, diabetes. In infections it is lowered in proportion to the virulence of the infection, but increases with the recovery of the organism, and in immune animals is above normal. In the treatment of disease, causes of acid reaction should be avoided, particularly in infections. Thus the action of the skin and kidneys should be favored, and the production of acids by fermentation in the intestinal canal should be prevented. The administration of alkalies in moderation is useful, but cannot be expected to raise the alkalinity of the blood to a high degree. This is due to the fact that inorganic alkalies are either stored temporarily in the liver or rapidly excreted by the kidneys. The increase of alkalinity in cases of recovery from infection is due to the production of a curative substance which is alkaline in reaction and which is a nitrogenous organic compound, and is derived from the proteids. A meat diet should therefore seem especially suited to patients suffering from infection.

Cystitis Faveolata.—F. KREISSL* describes a form of cystitis which begins as a superficial inflammation, gradually involving the muscular coat and eventually extending to the interstitial connective tissue; it may even penetrate the bladder wall, resulting in a pericystitis. The urine stagnates, depositing a thick material consisting of pus, epithelium, triple phosphates and bacteria. This renders the urine ammoniacal by fermentation and furnishes new material to keep up the severe cystitis. This form of cystitis is differentiated by the fact that, in washing, the fluid never returns from the bladder perfectly clear and free from pus flakes. In the management of these cases the main principles are effective disinfection of the whole viscus, continuous drainage of the bladder, at least for a while, and finally general hygienic and dietetic measures.

Tubercular Pelvic Peritonitis.—C. C. ALLISON† finds that the occurrence of this disease bears a direct relation to the circulatory changes and lymphatic engorgements, which occur with greatest frequency during the functional activity of the genital system; in either case the tubercle bacilli may primarily enter the lymphatic space, or they may gain entrance through a soil previously exposed by protracted multiple bacterial infection. The types of this disease are usually well defined and may be said to occur in three forms: the acute miliary, involving the entire peritoneum and presenting a well-marked train of symptoms of an acute systemic disease; the chronic, caseous type, attended by a local collection of purulent material, with extensive adhesions and tissue degeneration; the chronic fibrous type, a more subacute form, or a late stage of the two first varieties, attended by a dense fibro-plastic exudate and a small amount of blood-stained fluid. The prognosis is considered good, though there is still some diversity of opinion as to ultimate complete recovery. Exploration of the abdominal cavity appears to be the best therapeutic measure to be employed.

Surgical Operations During Hypnotic Sleep.—A. MACDONALD‡ gives in detail two cases of surgical operation during hypnotic sleep witnessed by him and performed by Dr. Schmeltz, of Nice. The one was amputation of the right breast performed on a girl, 20 years old. The patient appeared to feel very gay and from time to time laughed loudly; she took the

*La Presse Medicale.
†Centralblatt für Gynäkologie, No. 5, 1899.
‡Medicine, July, 1899.

*Medicine, July, 1899.
†Jour. Am. Med Assn., July 1, 1899.
‡N. Y. Med. Jour., June 24, 1899.

most favorable attitudes to assist the operation, extending her arm to avoid the necessity of having it held. The operation was a success in every respect and cure was complete on the fifteenth day. The other case was one of ectropion of the lower left lid in a girl of 18 years; a V-shaped incision was made in the lid and the fragment removed; three pins were placed parallel through the ends of the wound and united by a metallic thread. During operation the eye remained wide open in spite of contact with instruments; the patient felt no pain, and when she awoke would not believe that she had been operated upon.

Prostatic Hypertrophy.—R. Guiteras* considers the clinical division of prostatic hypertrophies into three forms as of most service in regard to prognosis and treatment. These are: (1) uniform enlargement in all directions with the general form of the gland preserved; (2) irregular enlargement, which includes by far the greatest number of cases; (3) the localized variety, in which the gland is normal, except in one small area. The choice of operative procedure is between prostatectomy and the Bottini, of which the latter is to be preferred as being less difficult and attended with a far smaller mortality. The results obtained by a number of surgeons, including the report of Bottini himself, are reviewed. His own experience comprises twenty operations with two deaths; of the remaining cases fifteen have improved, and in two of them no residual urine is now present, while in the other thirteen only one-eighth to one-quarter of the amount present previous to the operation now exists; the patients seem to complain after the operation principally of irritability of the bladder.

Hot-Air Cauterization in Lupus Vulgaris After the Method of Dr. Hollander.—J Frank† describes this method, the principle of which is to gradually heat the diseased tissue from the degree of simple superficial burning to complete cauterization but without contact; by means of a simple apparatus, air under pressure and at a temperature of about 300° C. can be concentrated upon nearly as small an area as with the Paquelin cautery. Two degrees of treatment are distinguished—absolute and relative cauterization. The latter is of special significance and the chief point of the method. Healthy and diseased skin behaves differently under relative cauterization; if the stream of hot air is directed upon a focus affected with lupus nodules, the healthy tissue, from the thermal effects, becomes ischemic, contracts and grows quite white; in this active contraction and evacuation of blood the lupus area cannot participate because the tuberculous and lymphatic tissues have none, or only modified, blood-vessels. The nodules protrude even more from the contracted skin and are acted on by the stream of hot air. The ischemic parts are replaced after a few days with blood, while the tubercles and diseased tissue slough. In the center of the granulated surface islands of epidermis form, through whose confluence large areas are covered with cuticle. In absolute cauterization this is not the case; here a scab grows from the margin towards the center. The after-treatment consists in the application of a lanolin dressing, which should remain three or four days if possible; the treatment of the granulating surfaces is that ordinarily employed; moist bandages are in general to be avoided. Illustrations are given showing the improvement in three cases.

Acute Anterior Poliomyelitis.—E. Wing* presents a brief review of the evidence which has accumulated to show that this disease is an inflammatory process of vascular origin, and probably of an infectious nature; this evidence is considered as anatomic, pathologic and clinical. As indications in treatment, methods employed in any acute infectious disease are recommended in the initial stages; as soon as danger of inflammatory reaction has passed, the paralyzed muscles should be exercised, for which purpose electricity is valuable; massage is of value, and should be as thorough as the case permits; active exercise is the best, and should be encouraged in all possible ways; transplantation of tendons, care in prevention and correction of deformities when necessary; finally, attention is called to Gower's admonition that, after six months, so far as the cord is concerned, the lesion has become a cicatrix.

Tetanus Treated with Antitoxin.—H. B. Gessner† reports a case of tetanus in a boy seven years old; three injections of antitetanic serum were given, aggregating 40 c.c. in all, in thirty-six hours, with some improvement; death followed the administration of the last dose of serum, when the patient was still improving, without any apparent change in the symptoms. The death is attributed to exhaustion, as in this case unsatisfactory feeding and lack of absolute quiet enjoined no doubt permitted dissipation of the boy's vital energy; it is not probable that the 40 c.c. given in thirty-six hours, in three doses, caused the fatal outcome, since from 50 to 100 c.c. can be given to an adult in one or two doses.

Why the Child Strains at Stool and the Way to its Relief.—T. C. Martin‡ finds, from the inspection of dried specimens of the infant's lower intestine, that the wall is thin compared to that of the adult; it is impossible to distinguish longitudinal muscular bands, so that the intrinsic power of peri-

*Jour. Amer. Med. Assn., July 1, 1899.
†Medicine, July, 1899.

*Medicine, July, 1899.
†Jour. Am. Med. Assn., June 24, 1899.
‡Columbus Med. Jour., June 13, 1899.

stalsis cannot be present to a great degree; moreover, the mesentery of the sigmoid flexure and rectum is of great length, contributing to the possibility of angulation of the gut; the third factor is the rectal valve, which is particularly well developed at birth, spanning one-half the diameter of the gut; finally the bony pelvic outlet is so contracted that the limits of anal expansion are such as to defeat the passage through it of other than fluid feces. Diet, hygroscopic suppositories and fluid enemata are of service in preventing prolapse of the rectum and inguinal hernia, which so often occur; massage of the abdomen, removal of the valve by operation, and gradual dilatation of the pelvic outlet by the introduction of the finger, are recommended when necessary.

Protargol in Gonorrhea.—W. L. BAUM* reports a series of fifty cases in which he used protargol according to the method advocated by Neisser. In fifteen cases of first infection, in which no complication occurred, the discharge disappeared in a little less than thirteen days, while the gonococci were found as late as the seventeenth. The results have been better than in any similar number of cases treated by Janet's irrigation method, and were attended with less complications. From his experience with the drug, he has come to the conclusion that the protargol solution, when used in the manner suggested by Neisser, is a distinct advance in the treatment of gonorrhea.

Experiences in Intestinal Surgery.—M. D. MANN† reports a case illustrating an unusual complication of difficulties, all of which were overcome, though celiotomy was performed nine times, the patient eventually making a good recovery. The operations were as follows: 1, oöphorectomy; 2, lumbar colotomy; 3, lateral anastomosis—ileum to sigmoid; 4, division of ileum near ileo-cecal valve—closure of two ends; 5, imperfect closure of descending colon below artificial anus; 6, closure of median fecal fistula and separation of intestine at artificial anus—complete closure of two ends; 7, closure of ventral hernia; 8, same; 9, same. These operations covered a period of two years and three months; from frequent use a tolerance for ether was acquired, so that it was impossible to put the patient fully under its influence; chloroform acted well, though it took a large amount to affect her. No adhesions were found in the later operations, except of a portion of the intestine to the abdominal wall near the line of incision at the time of the fecal fistula.

Rubber Gloves in Aseptic Abdominal Surgery.—C. H. RICHARDSON‡ advocates the use of rubber gloves by all surgeons, believing that the hands are never absolutely sterile, regardless of the method used to accomplish that purpose. The hands should be washed as carefully in all cases as though gloves were not intended to be worn, and the best system to accomplish the purpose is minutely described. The difficulty of getting on the gloves satisfactorily can be obviated by sterilizing them as follows: wash the gloves in soda solution, inside and out, and holding for a minute over a heater or gas flame, reversing once; dust liberally the inside with dry-heat sterilized soapstone; wrap each pair in a double layer of gauze; they are placed on a towel in a formic-aldehyde sterilizer for two hours; wrap in the towel already at hand, mark size of glove with graphite, and they are ready at any time for use. They are sterile, dry, already powdered, and can be put on in ten seconds.

Caput Obstipum Musculare.—M. L. HARRIS* discusses briefly the cause and nature of torticollis, with the report of a case and the histologic changes in the muscle, which are of a slow, progressive character and extend to and involve the muscle sheath, the adjoining fasciæ, the vascular sheath, the lymphatics, etc. The conclusions reached are that torticollis is a postnatal chronic inflammatory condition, due to infection affecting principally the sterno-cleido-mastoid muscle, and accompanied by contraction; it usually follows an intrapartum laceration of the muscle; that the affection is primarily for a variable, though considerable, time progressive; that the best treatment is complete extirpation of the contracted muscle with the surrounding tissues.

Gastro-Intestinal Antisepsis.—J. MILLS† attributes the apparent increase in the number of instances of food-poisoning to the fact that food infection has only recently been regarded as a cause of illness. Food-poisoning may originate in one of three ways: (1) the poison is generated wholly before the food is taken; (2) the infecting organism may begin the elaboration of its poisonous products outside of the body and continue the same process inside of the same; (3) the infection may not result in the production of poisons until the food is taken into the system. Natural antisepsis of the stomach is never complete, for hydrochloric acid is not present in sufficiently large amount and the period during which food remains in the stomach is too short for this process to be perfected. Deficient motive power and deficient secretory activity open the way to infection by germs always present; a diminished secretion of bile or its absence in the intestinal tract permits fermentation, with intestinal indigestion and gaseous distention. The general treatment in gastro-enteric infections should, therefore, be, first, to empty the stomach, and secondly to cleanse

*Medicine, July, 1899.

†Am. Med. Quarterly, June, 1899.

‡N. Y. Med. Jour., June 24, 1899.

the bowels by laxatives or enemata and the administration of food as nearly sterile as possible. In the endeavor to establish an antiseptic condition, the drugs to be relied upon are salol, calomel, castor oil, bismuth and dermatol; these are to be preceded by gastric lavage and irrigation of the colon. Attention to diet and general hygiene complete the steps necessary to the complete restoration of the patient.

Comparative Test of Mixed-Fat Emulsion and Cod-Liver Oil.—W. J. Mersereau* reports the results obtained at the Hospital for Ruptured and Crippled from the use of the Russell emulsion of mixed fats as compared with the results from the use of cod-liver oil; a certain number of children were chosen and divided into two groups, the diseases and general conditions in each corresponding as nearly as possible; to the children in one group the fat emulsion was given; to those in the second the cod-liver oil. The improvement was by far greater in the emulsion group, the gain in weight nearly double and the losses about two-thirds those in the oil group; in color, sixty-five per cent. of the patients in the emulsion cases were improved, to be compared with thirty-one per cent. of those in the oil cases. There was a certain better appearance about the patients in the emulsion group and improvement began earlier in them.

Surgical Gynecology Among the Insane.—A. T. Hobbs† refers to the good results following appropriate treatment in insane women found to be suffering from some disease of the pelvic organs. Of 187 selected insane women, 163 were fouud to have distinct pathologic lesions or abnormalities; of these, 155 were operated upon on physical grounds alone. Mental recovery followed the physical restoration to health in 38½ per cent., mental improvement in 26 per cent; no mental improvement was observed in 33 per cent.; 2½ per cent. died; 49 of the 100 women, who either recovered or improved mentally, had been insane two years or over prior to surgical treatment; were it not for this surgical treatment many of them would have remained helpless, hopeless lunatics for life, instead of being able to return to their homes in good mental and bodily health.

Use of Arsenic by Rectum.—Renaud‡ advises in those cases where the stomach will not tolerate the use of arsenic to give it by the rectum. He uses a syringe holding five cubic centimeters and makes his solution of 4 of Fowler's solution to 56 c.c. of distilled water injected from 1 to 3 syringefuls a day, according to the amount of arsenic wanted. Lately he has begun the use of cacodylate of soda, which is an organic combination of arsenic. This salt is very soluble in water, non-toxic and unirritating to tissues; 1 g. of it, which contains 0.468 of arsenic, has been injected into the veins of a rabbit without any toxic effects. He uses two solutions, one containing 0.25 cg. of cacodylate of soda to 200 c.c. of distilled water; the other contains 0.40 cg. of cacodylate of soda to 200 c.c. of water, and injects per rectum—during the first 6 days of treatment 2 syringefuls a day; during the next 6 days 3 syringefuls a day, and then stops for five days.

*N. Y. Med. Jour., July 1, 1899.
†Canadian Practitioner, July, 1899.
‡La Presse Medicale.

A Critical Study of "Moral Insanity."—There has always been considerable doubt among alienists as to whether the term "moral insanity" was a justifiable one or not. Many hold that moral insanity is only one symptom of a more complex psychosis. Naeke* divides all cases of so-called moral insanity into three groups: (1) (the greatest) imbecility; (2) primal insanity of a paranoic type; (3) those who belong to the group of degenerates in Magnan's sense of the term. A diagnosis of moral insanity is justified only when the inherited pathologic character can be clearly demonstrated and when a moral defect is clear. It is doubtful whether as yet cases which are diagnosed as morally insane cannot be included in some other classification, especially that of degenerates. The difficulty of determining normal moral character is so considerable and the normal in any case is so ill-defined, that it seems scarcely possible as yet to determine a class of moral insanity. Granted that such a diagnosis is made therapeutically, then there are two courses to pursue: one is to send the individual to the country under as strict discipline as is possible, and perhaps under the influence of a quiet, out-of-door life, with some simple manual labor a certain improvement may take place. The other is to send them to institutions which are midway between prisons and insane asylums. In these places would be found certain imbeciles, alcoholics and a portion of the insane criminals.

Treatment of Appendicitis.—G. D. Ladd,† in considering which cases require an operation, assumes that it is agreed that operation is demanded when the danger from the disease, in any given case, is greater than the danger attending the operation. In any case where there is infection of secretions within the appendix, obstruction of the vascular supply to the appendix or the later conditions of death of a portion of its wall, or infection of the peritoneum, the proposition that the danger to the life of the patient is greater without than with operation is the only tenable one. The question as to the danger in either event can be answered only by a careful consideration of all the symptoms, and the rule is advocated to operate early in any case of appendicitis when any one of the symptoms is severe. To further elaborate, in one case it

*Psychiatrische Wochenschrift, June 24, 1899.
†Medical Standard, July, 1899.

may be repeated vomiting that marks severity of type, in another high temperature, in another rapid pulse, in another severe and persistent pain, in still another great tenderness; but the prominence of any one or more of these symptoms indicates something more than simple mucous inflammation within the appendix, and therefore immediate operation.

How to Give Anesthetics. — W. S. DEUTSCH* deals with the subject from the practical side only, basing his opinions upon his own experience, in administering ether and chloroform 1075 times. The art of administering anesthetics can be learned only by practice, and to be successful the anesthetist must have self-confidence, the knowledge of the dangers that might arise, and ability to combat them when they do occur; he must give the anesthetic and do nothing else; knowledge of the patient's general condition, temperament, condition of pulse and respiration, and of the mouth, is essential. He suggests as a safe rule to guide the anesthetizer that the administration should be begun only when everything is ready for the operation; that the patient be kept under the influence just enough to allow the surgeon to do thorough work and to observe the pupillary reflexes as an infallible guide to the degree of narcosis.

Advice to Gonorrheal Patients.—F. C. VALENTINE† draws the following conclusions from a lengthy discussion of this question: 1. The importance of gonorrhea as a disease; the necessity of its prompt, early treatment should be impressed on the patient, fortified with such explanations as his intelligence and education admit. 2. Witticisms regarding gonorrhea, besides being in bad taste, are likely to cause patients to view it in a trivial light. 3. If properly treated from the very beginning of the first manifestation of the disease, clap is bereft of most of its dangers, and is, in many instances, cut short. 4. The complications may arise early and may prove fatal to the patient. 5. Clap can render a man incapable of sexual intercourse and unable to procreate children. 6. A man may believe himself cured of gonorrhea, marry, and many years later infect his wife. 7. It is the duty of a person with clap to see that he carries no infection to another person, or to any article from which another can be infected. 8. No inborn or acquired immunity to gonorrhea exists. 9. Patent medicines, secret preparations, and "favorite prescriptions" are useless and dangerous. 10. Clap is not a self-limited disease; it does not "run its course," but requires active treatment, no matter how mild the attack. 11. No patient should be discharged as cured until it is proven that he can no longer convey the disease to others. 12. The only means of preventing clap is in education. The outlines of the pathology and physiology of the genito-urinary organs should be taught in boys' high schools, in literary universities, and by evening lectures to the working people.

The Ill Effects of the Roentgen Rays as Demonstrated in a Case Herewith Reported.—DAISY M. ORLEMAN* reports a severe injury, of ten months' duration, resulting from the application of Roentgen rays to her left leg to ascertain the approximation of the fragments after a fracture of the femur. The first exposure was unsuccessful, and a second one was made after three months, with a similar result; the third exposure, made about two months later, was likewise unsuccessful, but a slight tingling sensation was felt; the duration of each exposure was seven minutes, spark length eight inches, voltage 110, egg-shaped tube, about six inches from terminal to terminal, distance of tube from limb ten inches, position of tube directly above and parallel to limb, anode nearest knee. Nothing was observed till twenty-one days later, when the first appearance of inflammation occurred, covering an area of about one inch, which caused some itching. The area increased in size gradually, the superficial layer of skin was cast off, leaving an exposed, painful surface; a false membrane developed, which gradually increased in thickness, and soon the central portion of the lesion presented an open ulcer; the affected area covered about four inches. After exhausting the list of possible applications and resorting to general tonic treatment without avail; the sloughing area was removed by operation, and the wound closed by stitches; sloughing recurred in spite of all treatment, and eventually the ulcer again reached its former size, and gave evidence of further necrosis, even to gangrene. Finally, absolute rest in bed, with a splint under the leg, the application of flaxseed poultice every three hours, day and night, and the administration of opium and calomel, as required, to control the pain, resulted in improvement, so that three weeks later the first skin graft was made, and repeated four times in one month; skin entirely covered the wound about one and one-half month after the first graft was made. The essential part in the treatment of the injury was the strict observance of the therapeutic value of local rest.

Angina Pectoris.—J. D. MORGAN† reviews briefly some of the more important theories heretofore advanced regarding this disease, and reports two cases coming under his own observation; in one, autopsy revealed no morbid condition of the heart or its vessels, while the other showed a dilated left ventricle, with increased growth of connective tissue in the myocardium at the expense of the muscular tissue. From all the facts at hand, clinical, pathologic and

*N. Y. Med. Jour., June 24, 1899.
†Philadelphia Medical Journal, July 8, 1899.

*N. Y. Med. Rec., July 1, 1899.
†Jour. Am. Med. Assn., July 1, 1899.

physiologic, it would seem that, whereas sclerosis of the coronary arteries or aorta, or dilatation of the heart, etc., is found in a large number of cases of angina pectoris, yet attacks of true angina may occur in patients who are free from organic disease of the heart, and vice versa; we may find most extreme calcareous conditions of the coronary arteries to exist, with no history of cardiac distress, and death due to conditions entirely foreign to angina pectoris. The indications for treatment are given, including the use of baths, massage and electricity.

Disease in Schools.—L. OTT* says that the increase of contagious diseases during the school period is evidently due to the spread of the diseases in the schools. The sources of danger are: (1) being in school during the inception and development of the disease; (2) returning to school too early in the convalesence or permitting children of an infected household to attend school; (3) in daily attendance in school during a light and overlooked attack of contagious disease. He advocates the plan of having teachers acquire some training in the detection of the ills of children; to distinguish a normal from an abnormal throat; to discern the flush of fever, scarlet rash and any suspicious cough that might lead to pertussis. This, together with the examination of all suspicious cases by a medical inspector, would minimize the danger of the spreading of disease, by its early detection.

A Further Contribution to Exclusion of the Intestine.—KAMMERER† reports a case in which more than six feet of the small and large intestines were first unilaterally and later on completely excluded from the fecal circulation, without detriment to the patient; by "complete exclusion" is meant the withdrawal of a loop of intestine by cross section of the gut at two points, without absolute closure of this excluded loop, so that no communication is present between the lumen of the latter and the external surface of the body; this latter condition is designated "complete occlusion." A short synopsis of six cases of complete occlusion is given, in five of which no disturbances followed; in two cases the operation of complete occlusion was done upon an intestine which up to that time had functionated normally; in the remaining three cases other operations (colostomy, complete exclusion, with open ends, unilateral exclusion) had been previously done; the latter method should always be adopted. The amount of irritation to which the mucous membrane is subjected will determine the quantity of secretion rather than the fact as to whether large or small intestine is excluded. A diseased portion of intestine should never be completely occluded.

*Jour. Am. Med. Assn., July 1, 1899.
†N. Y. Med. Record, Jnly 1, 1899.

A Grooved Perineal Canula to be Used as a Guide in Performing Perineal Sections in Cases of Urethral Obstruction.—R. GUITERAS* describes an improved instrument which consists of a grooved canula, four and one-quarter inches long; handle, two and one-half inches long, attached at an angle to the canula; trocar, four and three-quarter inches long. The cases in which its use is indicated are those of: (1) impermeable stricture with retention; (2) ruptured urethra; (3) extravasation of urine; (4) extensive urinary abscess; (5) perineal cellulitis; (6) fracture of pelvic bones, with pressure upon the urethra. It is understood that in all these cases no guide can be passed through the urethra into the bladder. The technique of the operation is given; after-treatment is the same as in any case of perineal section. The instrument can be used also for a number of other purposes where an ordinary trocar and canula is required.

Some Infrequent Sequelæ of Typhoid Fever.—E. W. PRESSLY† reports the following sequelæ observed in cases of typhoid fever: Case I. During the second week after defervescence rheumatic purpura with joint swellings developed in a male 15 years old; convalescence was reestablished after two weeks. Case II. During the second week of defervescence following a relapse, petechiæ appeared in the limbs and spread over the entire trunk, face and mucous membranes; epistaxis, hematuria, intestinal hemorrhages and hematemesis followed, with death on the fourteenth day; the previous history of the patient, a male 33 years old, had been negative. Case III. Ten days after defervescence, gangrene of the left leg occurred in a boy of 12, necessitating amputation just below the knee. Case IV. A child of 7 years was suddenly seized with crossed paralysis after convalescence was established; paralysis partly disappeared, but pain in the head persisted and chronic hydrocephalus developed; evacuation of the fluid by means of lumbar puncture resulted in marked improvement. He also reports marked diminution in the size of the thyroid gland after typhoid fever in two patients, 16 and 14 years old respectively, who had been afflicted with ordinary goitre of considerable size; after a lapse of 2½ years there is no increase in size in either of them.

Three Steps in the Tuberculous Process in Children.—D. BOVAIRD‡ summarizes the subject as follows: (1) The primary lesion of tuberculosis in children is regularly in the bronchial lymph nodes or lungs. (2) The early manifestations of tuberculosis in children are extremely indefinite and uncertain; (a) tuberculous infection of the bronchial lymph

*N. Y. Med. Rec., July 1, 1899.
†Phila. Med. Jour., June 24, 1899.
‡N. Y. Med. Jour., July 1, 1899.

nodes as a rule cannot be diagnosticated; (b) latent tuberculosis is often roused and disseminated by the invasion of another disease, such as measles, diphtheria, etc., the presence of tuberculosis not being suspected; (c) the common type is acute miliary tuberculosis—it may occur in well-nourished infants; (d) the cause of tuberculosis is most often confused with chronic broncho-pneumonia or enterocltioitis; (e) the early manifestations are progressive emaciation, fever, and the presence of râles over the lungs; these are insufficient for purposes of distinction. (3) The terminal lesions include: (a) extension of the tuberculous process in the bronchial lymph nodes and lungs, resulting in the formation of abscesses, cavities, etc.; (b) diffusion of the tuberculous infection, constituting acute miliary tuberculosis, the principal viscera being affected in the following order: spleen, liver, brain, kidney, heart; the involvement of the brain is the most important, the meningitis being regularly fatal; (c) when bone is involved and there is prolonged suppuration, waxy degeneration of the viscera may occur.

A Case of Acromegaly.—A. HYMANSON* reports a case of this disease, occurring in a woman, thirty-nine years old; the first symptom was noticed five years before coming under observation. She presented the typical appearance: no enlargement of the thyroid; articulation slow, clumsy and thick; was excitable and irritable. For six months she was given one-half grain of thyroid extract three times a day; for two weeks there was a marked improvement in her nervous condition, but symptoms of thyroidism necessitated a decrease in the quantity of extract from time to time, and her mental condition became worse. For four months one grain of extract of pituary body was given three times daily, but without any improvement. An X-ray photograph taken of her hands showed that the great increase in size was due to overgrowth of soft tissues also, and not only to an alteration in the bones themselves; it is probable that the case is one of acromegaly and some myxedema combined, or some nutritional disturbance in the pituary gland.

A Primary Polymorphous Cell Sarcoma of the Nose.—A. S. WARTHIN† gives a complete history of this case, with report of autopsy and microscopical examinations of sections from the tissues involved; it was of great malignancy and was accompanied with metastases of great extent and a free sarcomatous mass in the right ventricle. Secondaries were found in the dura, pineal body, hypophysis, kidneys, pancreas, stomach, intestines, peritoneum, testicles, prostate, and the cervical, bronchial, retroperitoneal and mesenteric glands. The richness of the growth in cellular elements, the scanty stroma, the numerous large, thin-walled blood-vessels, the smallness and shape of the cells—all contributed to the facility of the rapid dissemination of the tumor. From the structure of the growth the diagnosis of the tumor as a myxomatous polymorphous-celled sarcoma would seem most appropriate,

*N. Y. Med. Rec., July 1, 1899.
†N. Y. Med. Jour., June 24, 1899.

Cystoscopy and Ureteral Catheterization in Women.—E. N. LIELL* gives briefly the indications for, and some of the precautions to be observed in, the use of the cystoscope and for catheterization of the ureters. General anesthesia is necessary in all cases excepting those in which the urethra is tolerant and of large calibre; in these, cocaine serves an excellent purpose. If difficulty is met in locating or entering the ureter, staining the urine by the administration of one and one-half grains of fuchsin, an hour or two before the examination, will be of great service, as suggested by Fenwick. Cystoscopy of the female bladder and ureters offers a large and increasing sphere of usefulness; opening up a ready means of differential diagnosis, consequent enlightened treatment and positive results.

Syphilitic Perichondritis of the Auricle.—F. R. PACKARD† reports a case of this rare manifestation of syphilis, which he observed in a colored male, aged 25; the swelling and pain began to disappear at once upon the administration of potassium iodid and the application of an ointment of yellow mercuric oxid; one month later the auricle had attained its normal condition, except for the presence of some hardening and thickening of the cartilage.

Hydronephrosis, Pyonephrosis—Nephrectomy in a Boy.—E. MARVEL‡ reports a case of hydronephrosis occurring in a boy aged four and a half years after being accidentally shot in the back. The day after the injury the urine was thick and dark, containing numerous blood cells. Two weeks later slight bulging in the right side was noticed, which gradually increased in size; aspiration confirmed the diagnosis of hydronephrosis; the swelling returned on the next day, when an attempt was made to remove the kidney, but the organ could not be readily found and drainage was established through a lumbar opening. The temperature soon became irregular, with sweating and wasting. An examination of the discharge two weeks after the first operation showed pus to be present in large quantities; the kidney was removed the following day and the patient then made an uninterrupted recovery. The skin has acted freely and the quantity of urine passed some months after operation was twenty fluid ounces and free from pathologic elements.

*N. Y. Med. Rec., July 1, 1899.
†Phil. Med. Jour., June 24, 1899.
‡Pediatrics, July 1, 1899.

Practical Therapeutics.

Resorcin-Alcohol in the Treatment of Seborrhea of the Face.—A. C. FRICKENHAUS* recommends the thorough application by the physician of 25 per cent. resorcin-alcohol in cases of seborrhea of the face. The patient is instructed to apply 10 per cent. solution himself for three days, once daily. If desquamation has then begun, lanolin or adeps lanæ should be applied every night till desquamation is completed. The same method is effectual in the treatment of pityriasis versicolor. Salicylic acid has a similar effect, and is better suited for dispensary practice, being much cheaper than resorcin; a concentrated solution contains from 20 to 25 per cent. of salicylic acid.

The Therapeutic Value of Formalin in Surgical Tuberculosis.—JOHANNES HAHN* has used a solution of formaldehyde in glycerin for two years. The results were everywhere so marked that he considers no other agent of equal value. Particularly was this the case in tuberculosis of the joints with cold abscess; also in tuberculous empyema. The concentration was one to five per cent. The joint best suited to treatment is the hip, and those least so the joints of the fingers. The method of treatment is the following: The abscess cavity is aspirated with a small trocar, then washed out with boric acid solution and one-third to one-half as much in amount of formalin-glycerin injected as came out on aspiration of the original exudate, after which the joint is put at rest. As a reaction there ensues fever, pain and increase of the fluid within the joint cavity, the same lasting several days. The operation must be repeated after two weeks; sometimes twice or more.

The Teschner Method of Treating Scoliosis.—L. ERICH, before the Clinical Society of Maryland, referred to the system of treating scoliosis devised by Teschner of New York. Dr. Erich said it is founded upon the belief that the want of equilibrium of the muscles on either side of the spinal column in scoliosis is caused by a weakened or rudimentary condition, not only of the muscles of the back, but of the muscular system in general, and that to benefit such patients it is necessary that the muscles of the entire body should be developed, educated and strengthened to the fullest extent. In all cases amenable to treatment all supporting or immobilizing appliances should be dispensed with, as they interfere with mobility, and thus, by weakening the muscles of the back, chest and abdomen, counteract the good effects gained by the treatment. All movements should be performed before a mirror, in a tightly-fitting jersey suit, so that the slightest error in attitude can be immediately detected by the patient. In this way an habitually correct position is cultivated.

Taking the standpoint that (1) lack of strength and lack of muscular development, (2) habitual faulty position with superimposed weight, and (3) lack of co-ordinating power or lack of muscular control, are the more important etiologic factors in producing deformities, it is aimed to correct these deformities by reversing these conditions. The methods are as follows: (1) developing the muscles and their strength, (2) by acquiring an habitually corrected position with superimposed weight, and (3) by educating all the muscles to proper co-ordination and to complete control. A pair of dumb-bells weighing from half-a-pound to five pounds is used in a series of twenty-six exercises for the development of the muscles. In addition to the development exercises, the patients work with heavy bars and bells. The weight of the bars and bells and the number of times that each heavy weight or pair of weights is handled depend upon the strength, capacity and endurance of the individual. Bells weighing from five to eighty pounds each, and steel bars and bar-bells weighing from twenty-six to over 111 pounds, are used in different ways. Bells are pushed from the shoulders above the head alternately as often as the patient can. The patient is instructed to swing a heavy bell with one hand from the floor above the head and down again, the elbow and wrist being fixed and the motion being repeated as often as possible in a systematic manner, then with the other hand the same number of times, and later with both. This employs all the extensor muscles from the toes to the head in rapid succession.

Diarrhea.—DR. G. JOACHIM* recommends:

Tannopine ..... 5 to 7 grains.
Calomel ..... 1-12 grain.
To be taken in one dose, 3 to 4 powders daily.

This medication proved of great value in fifty one cases of acute intestinal or gastro-intestinal catarrh.

DR. G. C. H. MEYER† advises the following mixture in eases of dysenteric diarrhea in children:

Castor oil ..... 8 to 10 minims.
Powdered gum arabic, enough to make an emulsion.
Tannopine ..... 4 grains.
Camphorated tinct. of opium ..... 10 minims.
Peppermint water, enough to make ..... 1 drachm.
Sig. This amount to be taken every two hours.

The author also speaks very favorably of a mixture of bismuth, tannopine and Dover's powder for the treatment of chronic forms of diarrhea in adults where the stools are fluid and more frequent than natural.

*Monatshefte für Prakt. Derm , June 1, 1899.
†Centralblatt für Chirurgie, June 17, 1899.

*Archives of Pediatrics, July, 1899.
†N. Y. Medical Journal.

Book Reviews

The Anatomy of the Central Nervous System of Man and of the Vertebrates in General. By PROF. LUDWIG EDINGER. Translated from the fifth German Edition by WINFIELD S. HALL, Ph.D., M.D., PHILO LEON HOLLAND, M.D., EDWARD P. CARLTON, B.S. (F. A. Davis, Philadelphia. 1899.)

This translation of the well-known work of Edinger brings within the reach of every one the latest edition of the best short work on the comparative anatomy of the central nervous system that we have. Edinger's book occupies such a permanent place in neurological literature that little need be said concerning its excellence. The translation in the main is a very careful and conscientious one; and the italicizing of German terms that are almost untranslatable is especially praiseworthy. The free translation is first given and then the original German word is added. This will be much appreciated by those who know German and to whom a free rendering of such conventional German terms would be puzzling. The illustrations, which are so often the weak spot in a foreign translation, are more satisfactory than usual. The sharpness of outline and the fineness of detail which are found in the German editions are here in a measure lacking, but in spite of this defect, which it is impossible to overcome in a translation, the illustrations serve their purpose very well. A special word of praise must be given to the index, which in every way is a model and adds greatly to the usefulness of the book. All in all, this translation should be accorded a high place, and the neurologist as well as the general practitioner owes a debt of gratitude to the patience and conscientiousness of the translators who have placed this valuable work within their reach.

Pamphlets Received

A Report of Cases of Extensive Wounds of the Globe, by Vard H. Hulen, A.M., M.D. (Reprint from New York Eye and Ear Infirmary Reports.)

Artificial Dentures in Their Relation to the Speaking of the Singing Voice, by Dwight L. Hubbard, M.D. (Reprint from the *International Dental Journal.*)

Appendicitis: Observations on Sixty-two Operations in the Attack with Two Deaths, by George W. Crile, M.D. (Reprint from the *Cleveland Medical Gazette.*)

The Neuropathic Origin of Stuttering, by W. Scheppegrell, A.M., M.D. (Reprint from the *Philadelphia Medical Journal.*)

The General Health and the Upper Air-Passages, by J. C. Mulhall, M.D. (Reprint from the *New York Medical Journal.*)

Recollections and Reflections of a Quarter of a Century, by Stephen Smith Burt, A.M., M.D. (Reprint from the *Post-Graduate.*)

New Instruments. Excision of the Tonsils, by W. H. Peters, B.S,, M.D., etc.

The Pharmacologic Assay of the Heart Tonics, by E. M. Houghton, M.D. (Reprint from the *Journal of the American Medical Association.*)

On the Use of the Valerianates of Creosote and Guaiacol in the Treatment of Pulmonary Tuberculosis, by A. B. Briggs, M.D. (Reprint from the *New York Medical Journal.*)

Treatment of Endometritis, by T. J. Watkins, M.D. (Reprint from the *American Gynecological and Obstetrical Journal.*)

Tampons and Pessaries in the Treatment of Displacement of the Uterus, by T. J. Watkins, M.D. (Reprint from the *American Gynecological and Obstetrical Journal.*)

Gynecologic Diseases. Some Points in the Diagnosis of the More Common Ones, by T. J. Watkins, M.D. (Reprint from the *Journal of the American Medical Association.*)

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Mastoid Complications of the Exanthemata in Children, by Edward Bradford Dench, M.D. (Reprint from *Pediatrics.*)

Falsetto Voice in the Male; Report of Five Cases, by G. Hudson Makuen, M.D. (Reprint from the *Journal of the American Medical Association.*)

Appendicitis or Salpingitis with Complications, and a Report of Some Unusual Cases, by Thomas H. Hawkins, A.M., M.D. (Reprint from the *Medical Record.*)

An Improved Method for the Removal of Intraligamentous Cyst, by Thomas H. Hawkins, A,M.. M.D. (Reprint from the *Denver Medical Times.*)

DR. WAGONER enumerates what he terms the ten commandments of Apollo. They are directed to Apollo's hand-maidens—the nurses of the sick and injured. The first commandment reads as follows: "Thou shalt keep thyself at all times clean; thy hands, and the finger nails thereon; thy face and neck and the hair of thy head; thy teeth and mouth so that the breath of thy nostrils shall be sweet; the coverings of thy body shall be plain and withal most clean; thy raiment shall be wrought of such stuffs that dirt and stains shall be presently discovered and the raiment forthwith changed for that which is pure; thou shalt remember at all times that filth in the sight of Apollo is an abomination."